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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,469	07/15/2004	Shin Aihara	254785US0PCT	5141
22850	7590	10/31/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			DELCOTTO, GREGORY R	
		ART UNIT	PAPER NUMBER	
		1751		
DATE MAILED: 10/31/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/500,469	AIHARA ET AL.	
Examiner	Art Unit		
Gregory R. Del Cotto	1751		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### **Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 15 July 2004.

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 1-10 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-10 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9-04, 7-04.  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_.

## **DETAILED ACTION**

1. Claims 1-10 are pending. The preliminary amendment filed 7/15/04 has been entered.

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Specification***

This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-3, 5, 6, and 8-10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Jeschke et al (US 6,251,849).

Jeschke et al teach the use of waterbased cleaners for hard surfaces containing from 0.01 to 10% by weight of cationic polymers containing monomer units having the same formula as recited by the instant claims, and 0.1 to 50% by weight of one or more nonionic surfactants. See column 2, line 30 to column 3, line 15. Additionally, the cleaning compositions may contain auxiliaries such as solvents in ethanol, isopropanol, glycol ether, etc. See column 4, lines 50-69. In one embodiment, the cleaner is formulated as a ready-to-use solution which may be used as a spray cleaner. The cleaners are suitable as both multipurpose cleaners and as manual dishwashing detergents. The cleaners are particularly suitable for cleaning hard surfaces such as enamel, glass, china, linoleum, ceramic tiles, marble, metals, etc. See column 5, lines 55-69. Note that, the Examiner asserts that multi-purpose cleaning and ceramic tiles as taught by Jeschke et al would suggest substrates such as toilet bowls as recited by instant claim 7.

Specifically, Jeschke et al teach a bath cleaning in the mildly acidic range containing 3.85% of a C8-C10 alkyl polyglucoside, 1% of a C12-C14 fatty alcohol ether having 6 moles of EO, 1% sodium hydroxide, 1% ethanol, 0.3% of various polymers

which contain the same monomers as recited by the instant claims, 0.2% preservative, 0.9% perfume oil and the balance water. The Examiner asserts that the polymers as used in the Examples taught by Jeschke et al would inherently have the same molecular weight as recited by the instant claims because Jeschke et al teach polymers containing the same monomer units as recited by the instant claims and the instant claims recite polymers having a wide range of molecular weights. Additionally, note that, the Examiner asserts that Jeschke et al inherently teach compositions having the same antifouling properties as recited by the instant claims because Jeschke et al teach compositions containing the same components in the same proportions as recited by the instant claims. Jeschke et al disclose the claimed invention with sufficient specificity to constitute anticipation.

Accordingly, the teachings of Jeschke et al anticipate the material limitations of the instant claims.

Alternatively, even if the broad teachings of Jeschke et al are not sufficient to anticipate the material limitations of the instant claims, it would have been nonetheless obvious to one of ordinary skill in the art to arrive at the molecular weight of the polymer as recited by the instant claims in order to provide the optimum cleaning properties to the composition since Jeschke et al teach that the type of polymers added to the composition may be varied.

Claims 1-10 are rejected under 35 U.S.C. 102(a) as being anticipated by WO02/16356. An oral translation of this reference was given to the Examiner on 10/26/05 and a written translation of this document has been requested.

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

'536 teaches a bactericidal antifouling detergent for hard surfaces which comprises a polymer which as a weight-average molecular weight of 1,000 to 6,000,000 and in which monomer units having at least one group selected among quaternary ammonium groups and tertiary amino groups account for 10 to 100 mol% of all the monomer units, and a surfactant, and in which when the surfactant comprises an anionic surfactant. The bactericidal antifouling detergent sterilizes hard surfaces and shows antifouling properties, i.e., prevents fouling substances from adhering thereto and enables fouling substances adherent thereto to be easily removed. When used in a whole house, especially when applied to the walls and floors of the kitchen, bathroom, toilet, washstand, etc., and to instruments and apparatuses placed therein, the detergent enables sterilization, prevention of fouling substance adhesion, and easy cleaning. See Abstract. '536 also teaches the use of solvents as recited by the instant claims. '536 discloses the claimed invention with sufficient specificity to constitute anticipation.

Accordingly, the teachings of '536 anticipate the material limitations of the instant claims.

Claims 1-10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP-2001-271094. An oral

Art Unit: 1751

translation of this reference was given to the Examiner on 10/26/05 and a written translation of this document has been requested.

'094 teaches detergent compositions for cleaning hard surfaces containing a copolymer and surfactants. The detergent composition may also contain a solvent. The detergent composition is used for cleaning bathrooms, wash stands, and kitchen sinks. The detergent composition has high detergency and the effect of preventing adhesion of stain. See Abstract. Note that, the polymers are made up of the same monomers as recited by instant claim 1.

The Examiner asserts that the polymers as used in the Examples taught by '094 would inherently have the same molecular weight as recited by the instant claims because '094 teaches polymers containing the same monomer units as recited by the instant claims and the instant claims recite polymers having a wide range of molecular weights. '094 discloses the claimed invention with sufficient specificity to constitute anticipation. Note that, the Examiner asserts that '094 teaches compositions inherently having the same antifouling properties as recited by the instant claims because '094 teaches compositions containing the same components in the same proportions as recited by the instant claims.

Accordingly, the teachings of '094 anticipate the material limitations of the instant claims.

Alternatively, even if the broad teachings of '094 are not sufficient to anticipate the material limitations of the instant claims, it would have been nonetheless obvious to one of ordinary skill in the art to arrive at the molecular weight of the polymer as recited

by the instant claims in order to provide the optimum cleaning properties to the composition since '094 teach that the type of polymers added to the composition may be varied.

Claims 1-3 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Adler et al (US 5,308,532).

Adler et al teach novel water-soluble terpolymers. These terpolymers contain as polymerized units from about 92 to about 30 percent by weight of one or more C3-C6 monoethylenically unsaturated carboxylic acids, from 5 to about 50 percent by weight of one or more aminoacryloyl derivatives, and from about 3 to about 25 percent by weight of one or more monoethylenically unsaturated monomers polymerizable with the other monomers. These terpolymers are useful in detergent formulations, particularly automatic machine dishwashing detergent formulations. See Abstract. Note that, the Examiner asserts that these terpolymers contain monomer units which are the same as the monomers recited by instant claim 1. See column 3, lines 1-69. Additionally, the compositions will generally include a low-foaming water-soluble surfactant such as anionic, nonionic, cationic surfactants, etc. See column 8, lines 1-65.

Specifically, Adler et al teach a detergent composition suitable for cleaning dishes containing 20% sodium carbonate, 12.5% sodium citrate, 7.5% zeolite, 5% perborate, 7% RU silicate, 4% Olin Polytergent, and polymer. See column 10, lines 35-55. Suitable polymers include terpolymers containing monomer units as recited by the instant claims; these polymers have molecular weights of 4220, 4010, etc., which fall within the range as recited by the instant claims. Note that, the Examiner asserts that

Adler et al teach compositions having the same antifouling properties as recited by the instant claims because Adler et al teach compositions containing the same components in the same proportions as recited by the instant claims. Adler et al disclose the claimed invention with sufficient specificity to constitute anticipation.

Accordingly, the teachings of Adler et al anticipate the material limitations of the instant claims.

Claims 4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeschke et al (US 6,251,849).

Jeschke et al are relied upon as set forth above. However, Jeschke et al do not teach, with sufficient specificity, a method of cleaning toilet bowls using a composition as recited by the instant claims.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to clean toilet bowls using a composition as recited by the instant claims, with a reasonable expectation of success, because Jeschke et al suggest a method of cleaning toilet bowls using a composition as recited by the instant claims.

### ***Conclusion***

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Remaining references cited but not relied upon are considered to be cumulative to or less pertinent than those relied upon or discussed above.

Applicant is reminded that any evidence to be presented in accordance with 37 CFR 1.131 or 1.132 should be submitted before final rejection in order to be considered timely.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory R. Del Cotto whose telephone number is (571) 272-1312. The examiner can normally be reached on Mon. thru Fri. from 8:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Gregory R. Del Cotto  
Primary Examiner  
Art Unit 1751

GRD  
October 26, 2005